PROJECT 2019

PC VOICE ASSISTANT

Here voice is the key

PC Voice Assistant

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PC Voice Assistant

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Naman Solanki

Ravi Harkani

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Abstract

Currently keyword based searching facility is available in windows system,nowadays advance system adds functionality with speech recognition system,The key here is voice. A voice assistant is a digital assistant that uses voice recognition, speech synthesis and natural language. This is a program that will listen to the voice of the user than it will work according to that query. Pc voice assistant is useful to control windows, set alarm, events, web surfing, and sending e- mails to your colleagues.

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CHAPTER 1 :- INTRODUCTION

1.1 Characteristics of ExistingSystem

1. SetupReminder
2. PlayMusic
3. OpenYoutube
4. Send E-Mail
5. GoogleSearch
6. User FriendlyApplication
7. Native LanguageSupport
8. Making Personal Notes through VoiceCommands
9. Control Power Setting through VoiceCommands

1.2 Overview of Proposed System with advantage

Early on, text was the only way to Interact with an assistant. Now, Voice has taken over.

From Earlier times to Now, English Language was the only key to interact with the voice assistant but our assistantallowsGujarati language to interact with the Voice Assistant in PersonalComputer.

We have multiple commands in out native language Gujarati to interact with your Personal Computer.

Advantages

1. Gujarati InputSupported
2. Simple way to WakeAssistant

3. Gujarati to English (Translation) Support for English Supported Websites
4. chit chat in Gujarati for funtime

1.3 Scope (Scope – list of modules and their functions)

1. SpeechRecognition

   Speech Recognition is the module, and it is the module for recognize the speech of the user's voice through the microphone, we have used for recognize the speech/commands of the user.

2. Time

   Time is a python Module which allows us to handle various operations regarding time, it's conversions and representations, which finds its use in various applications.

3. OS

   The OS module in python provides functions for interacting with the operating system. OS, comes under Python's standard utility modules. This module provides a portable way of using operating system dependent functionality.

4. Pyttsx3

   Pyttsx3 is a text-to-speech conversion library in Python. Unlikealternative libraries, it works offline, and is compatible with both Python 2 and3

5. Pygame

Pygame is a Python wrapper module for the SDL multimedia library. It contains python functions and classes that will allow you to use SDL's support for playing cdroms, audio and video output, and keyboard, mouse and oystick input.We have used pygame for gujarati file play function in same party application.

6. Googletrans

Googletrans is a free and unlimited python library that implemented Google Translate API. This uses theGoogle Translate Ajax API to make calls tosuch methods as detect andtranslate.

Features:

- Fast and reliable - it uses the same servers that translate.google.comuses
- Auto languagedetection
- Bulktranslations
- Customizable serviceURL
- Connection pooling (the advantage of usingrequests.Session)
- HTTP/2support

7. Webbrowser

The webbrowser module in Python provides an interface to display Web- based documents. Under most circumstances, simply calling the open() function fromthismodule will do the right thing. In Unix, graphical browsers are preferred under X11, but text-mode browsers will be used if graphical browsers are not available or an X11 display isn’t available. If text mode browser are used, the calling process will block until the user exits the browser.

1.4 ProcessModel

(Describe the process model with Reason)

- PrototypeModel

Prototype is a toy implementation of the system it is used when technical solution are not confirm.

Why We Have Chosen The Iterative Waterfall Model?

- Because it is a early sample or release of product built to test a Concept andprocess.
- Because it helps us to reduce overall developmenttime.
- Because it allows user to Provide their Valuable feedback within the propercontext.
- Because our project is evolving and getting extended over considerable amount oftime.

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CHAPTER 2 :- SYSTEM REQUIREMENTS SPECIFICATION

2.1 UserCharacteristics

(Types of Users who is dealing with the System and their Roles)

- There are Two types of users in thesystem.
- Highest level of user is the Administrator who reserves all the rights of thesystem

User

- StartSystem
- GiveCommands
- VoiceAlternation
- Feedback

Admin

- FeedbackResponse
- BugFix
- Maintenance &Updates

System RequirementsSpecification (Describe each module and its functionalities)

1. User

F1: HEY 'ASSISTANT NAME'

Description: to active assistant by giving 'assistant name' voice command(program should have to open)

input: user's voice(query)

output: activate assistant

F2: RECOGNIZE

Description: it will listen and recognize the command which is speak by user (speech to text)

input: user's voice output:

converts into text

F3: SPEAK

Description: it will process the command given by user and give respected response (text to speech)

input: text

output: converts text into speech

F4: CHANGE VOICE

description: allows to change the voice

input: select voice option

output: selected voice

2. Admin

F1: MAINTAINING THE SYSTEM

description: maintaining system

input: changes to the system as per requirement of users

output: outcomes related to changes

F2: ACKNOWLEDGEMENT

description: feedback acknowledgement to user

input: feedback of users

output: Response to particular feedback

2.2 Functional Requirements

- The functional and non-functional requirements ofthe system are describedbelow

Functional Requirements:-

- In our System, User Interact with system by their voice to perform various dailytasks.
- Our application provides daily tasks like Sending E-mails, Setup reminders, Writing Notes, and GoogleSearch
- Our Application can access by student, teachers and all other users to perform their daily task moreeasily.

2.3 Non - Functional Requirements:-

- easy to use by providing moderate GUI to theuser
- provide regular maintainence by using feedback ofusers.
  portable for all window

CHAPTER 3 :- SYSTEMANALYSIS MODELING – USER-BASED

3.1Feasibility Study of the newsystem

The feasibility study is the most important step in any software development process . This is because it makes analysis of different aspects like cost required for developing and executing the system , the time required for each phase of the system and so on . If this important factors are not analysed then definitely it would have impact on the organization and development and the system would be a total failure. So for running the application and the organization successfully this step is very important step in software development life cycleprocess.

By making analysis with the requirement of the organization it would be possible to make a report of identify area of problem. By making a detailed analysis in this area a detailed document or report is prepared in this phase which has details like project plan or schedule of the project, the cost estimated for developing and executing the system, target dates for each phase of delievery of the system developed and so on.

TECHNICAL FEASIBILITY :-

The development of the system is technically feasible as the various technological needs or the development and deployment are fulfilled. The system is to be develop using familiar software and hardware environment /tools.(Windows 10,Pycharm,Python 3.5).

All the functional and non-function requirements of ‘PC Voice Assistant’ that should be developed appear to be implemented using Python 3.5 as Back-end/front-end.

COST FEASIBILITY :-

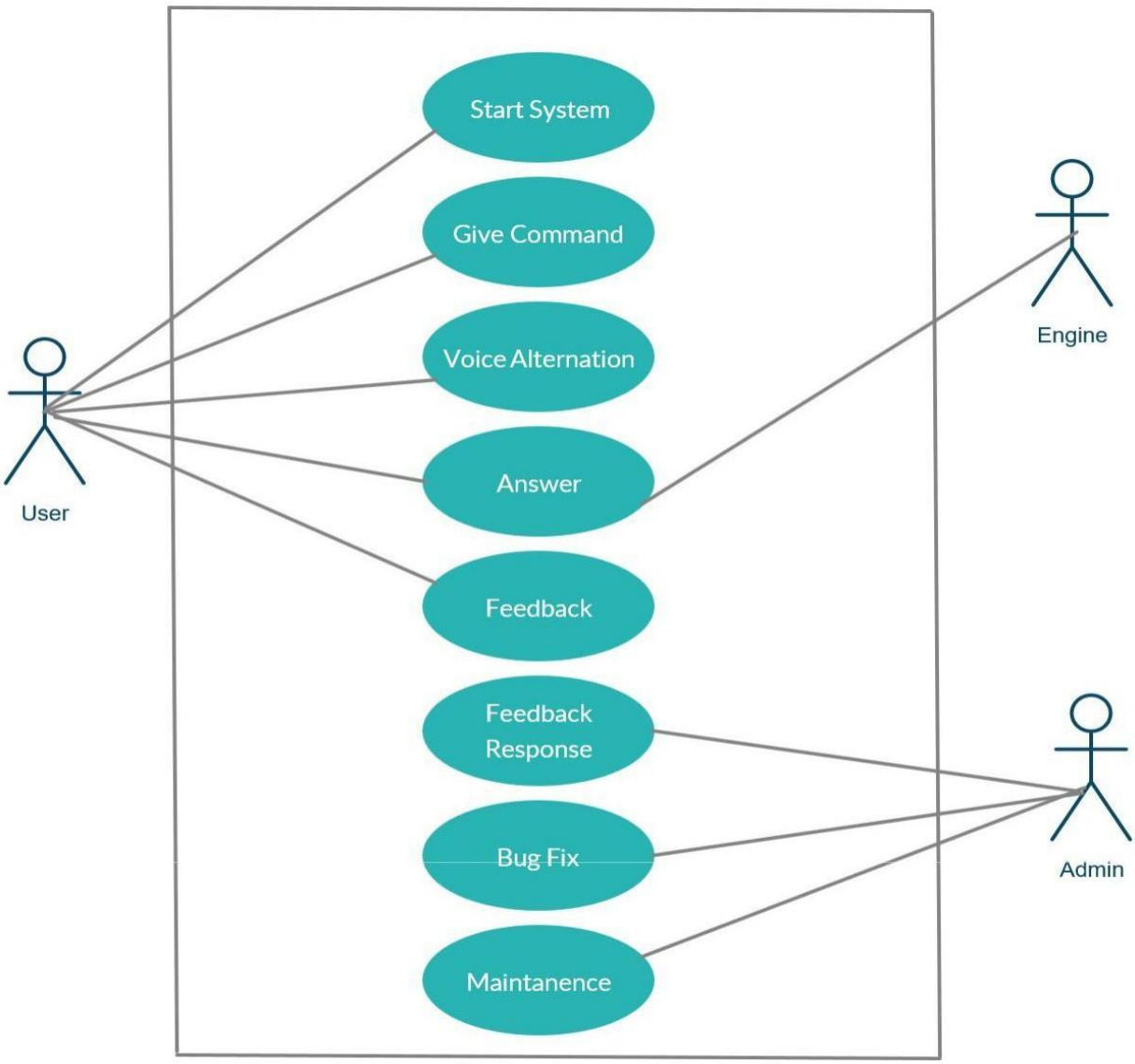
We have used Open-Source technologies to develop our Application so nothing costed us during this process.

TIME FEASIBILITY :-

1. First 6 months: - Create The ProjectReport
2. Second 6 months: - Create The WindowsApplication.

3.2 User-Based Modeling

3.2.1 USE-CASE DIAGRAM:-

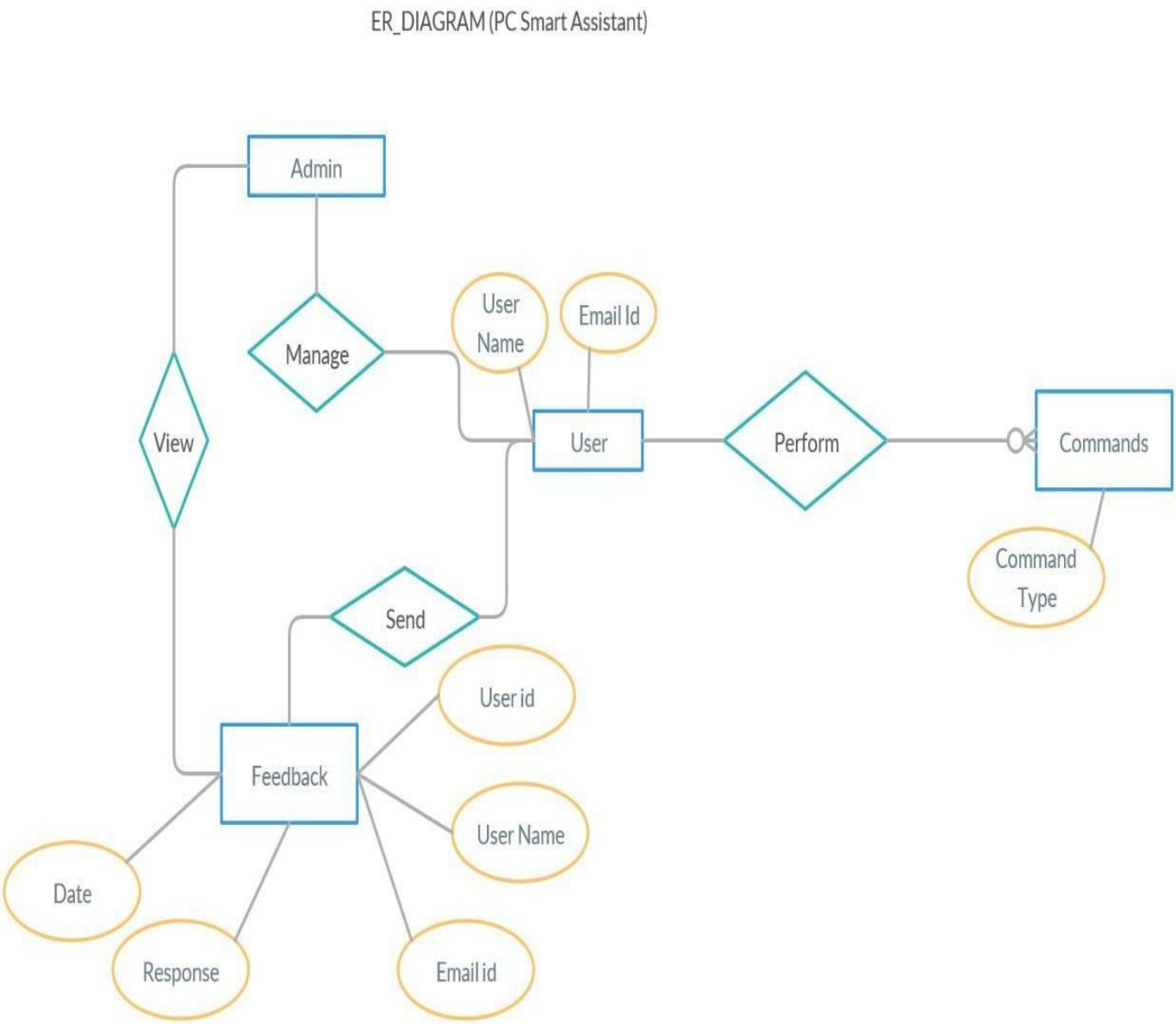


Use Case (Pc Voice Assistant)

CHAPTER 4 :-
SYSTEM ANALYSIS
DESIGN

4.1 Data Modeling

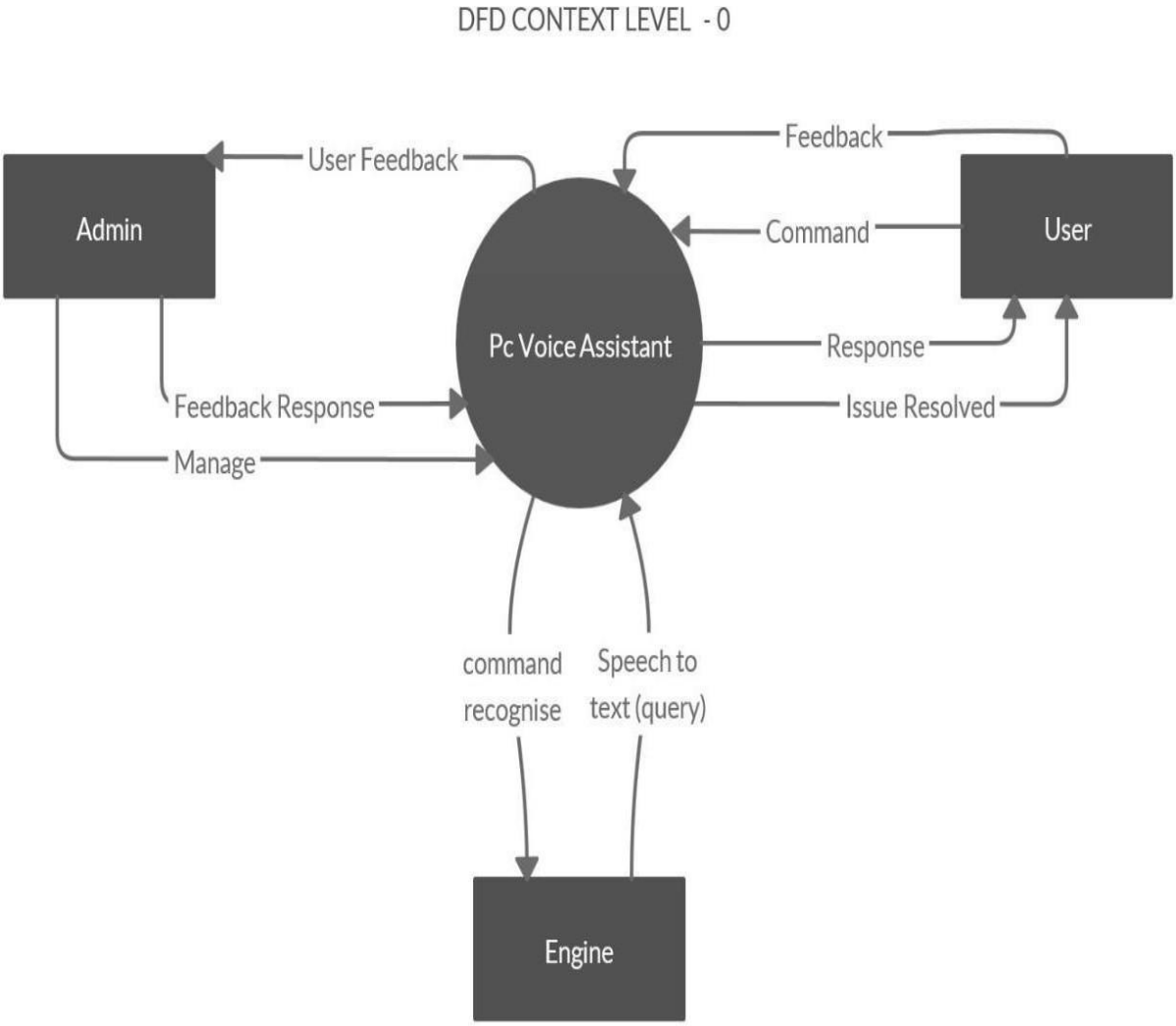
4.1.1 E-R (ENTITY RELATIONSHIP)DIAGRAM



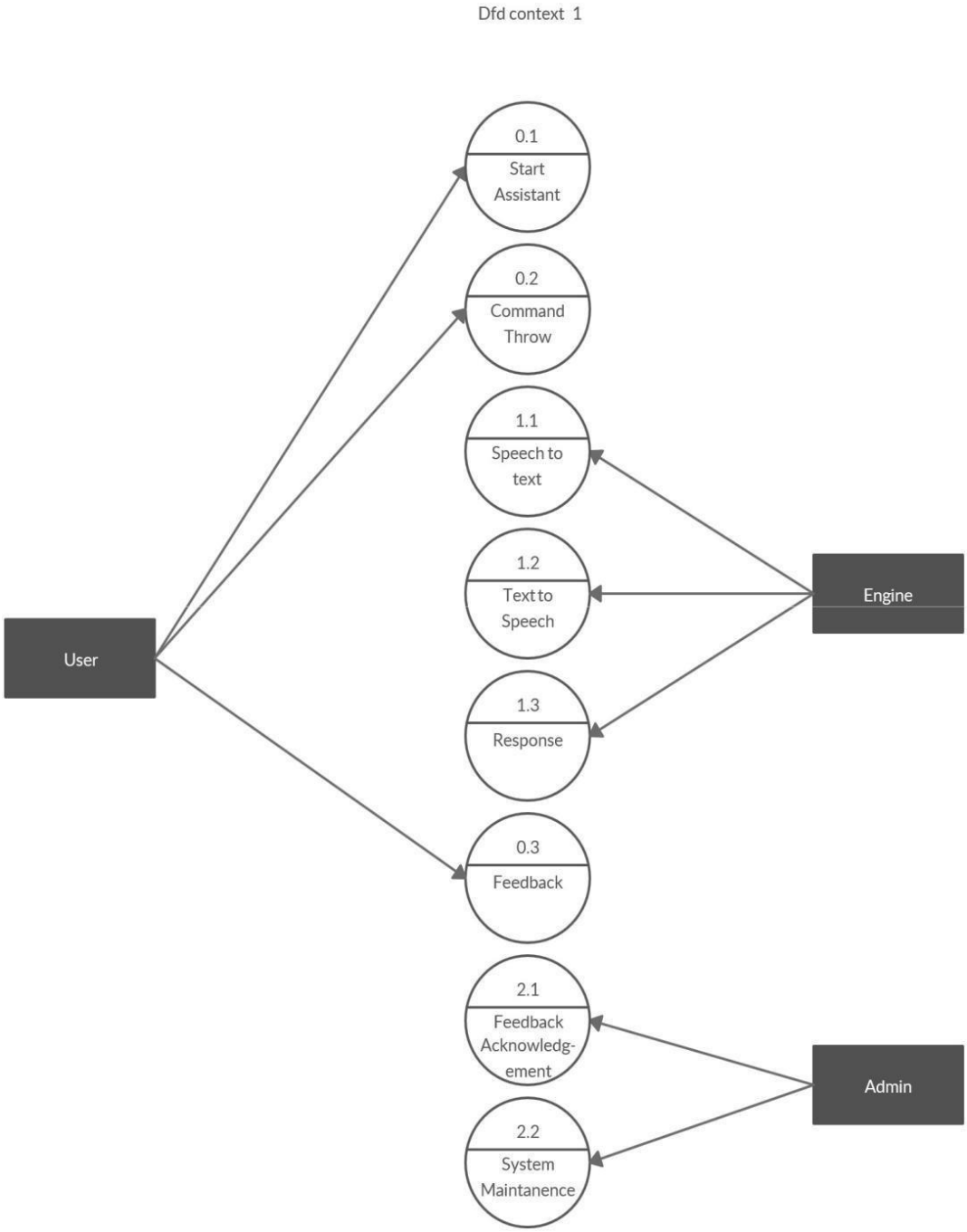
4.2 BEHAVIOURALMODELLING

4.2.1 Data FlowDiagrams

4.2.1.1 Context Diagram [Level –0]



4.2.1.2 Context Diagram [Level –1]



CHAPTER 5 :-

SOFTWARE AND HARDWARE REQUIREMENT

- HardwareRequirement
  - RAM
    - 1 GB (For SmootherPerformance)
  - PROCESSOR
    - Intel Core 2 Duo / AMD Any Ryzen3
- SoftwareRequirement
  - OperatingSystem
    - Windows7/8/8.1/10
- HardwareApplied
  - RAM
    - 4 GB (For SmootherPerformance)
  - PROCESSOR
    - Intel Core i5 (3rdGen)
- SoftwareApplied
  - SOFTWARETOOLS
    - PyCharm

Pycharm is an integrated development enviroment (ide) used in computer programming, specifically for the python language, it is developed by Czech Company JetBrains. Pycharm is cross platform used for windows, mac, and linux operating system.

- Python3.5

  Python 3.5 is a Version of Python programming language we have used to develop this PC Voice Assistant Windows Application.

- Windows10

  Windows 10 is the Windows Operating system we have used to develop this PC Voice Assistant Windows Application.

- LanguageApplied
  - PYTHON

    Python is an interpreted, high-level, general purpose programming language. Python is a dynamically typed and garbage-collected.

    It supports multiple-programming paradigms including procedural, object-oriented and functional programming.

    We have used it because it includes - presence of third party modules, open source and large community support, easy to learn and support.

CHAPTER 6 :-
SYSTEM DESIGN - UML

WHAT IS UML?

A UML diagram is a diagram based on the UML (Unified Modeling Language) with the purpose of visually representing a system along with its main actors, roles, actions, artifacts or classes, in order to better understand, alter, maintain, or document information about the system

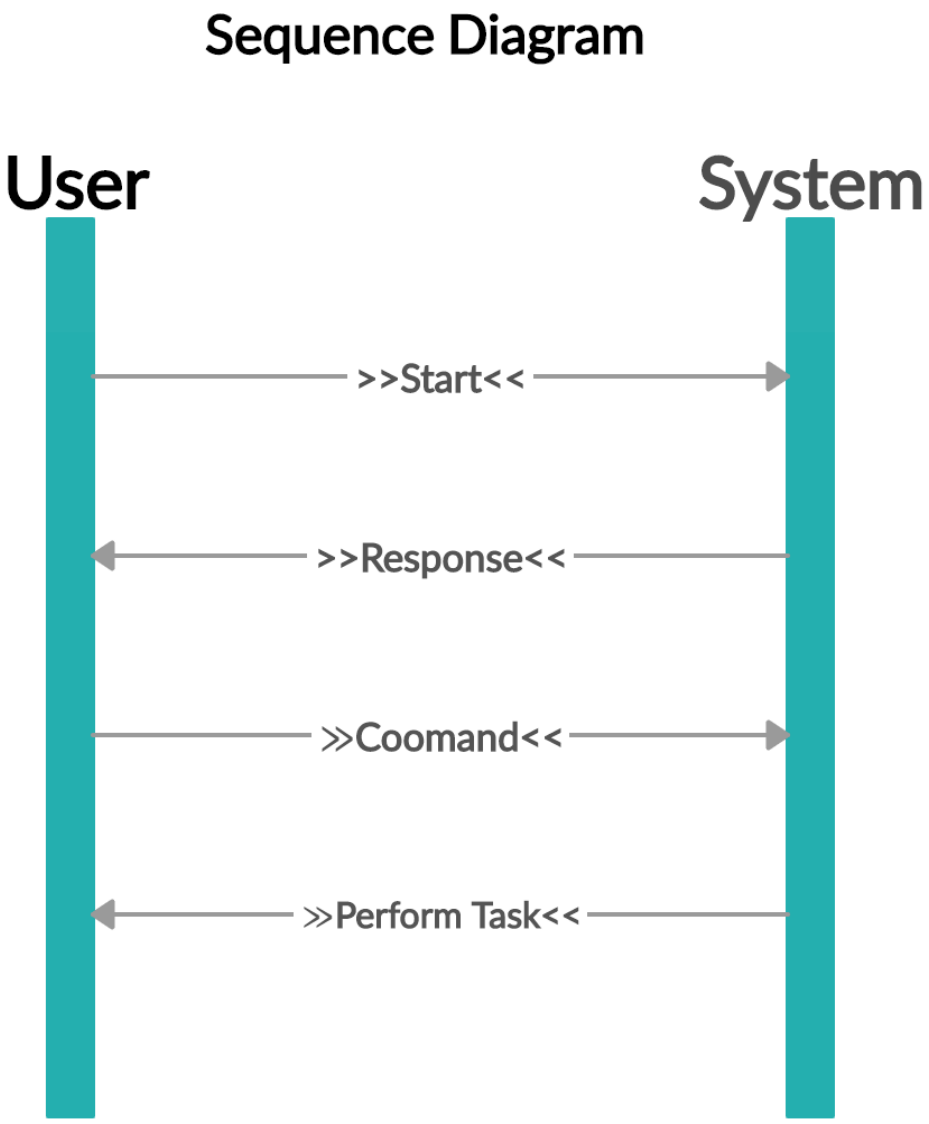
WHAT IS SEQUENCE DIAGRAM?

UML Sequence Diagrams are interaction diagrams that detail how operations are carried out. They capture the interaction between objects in the context of a collaboration. Sequence Diagrams are time focus and they show the order of the interaction visually by using the vertical axis of the diagram to represent time what messages are sent andwhen

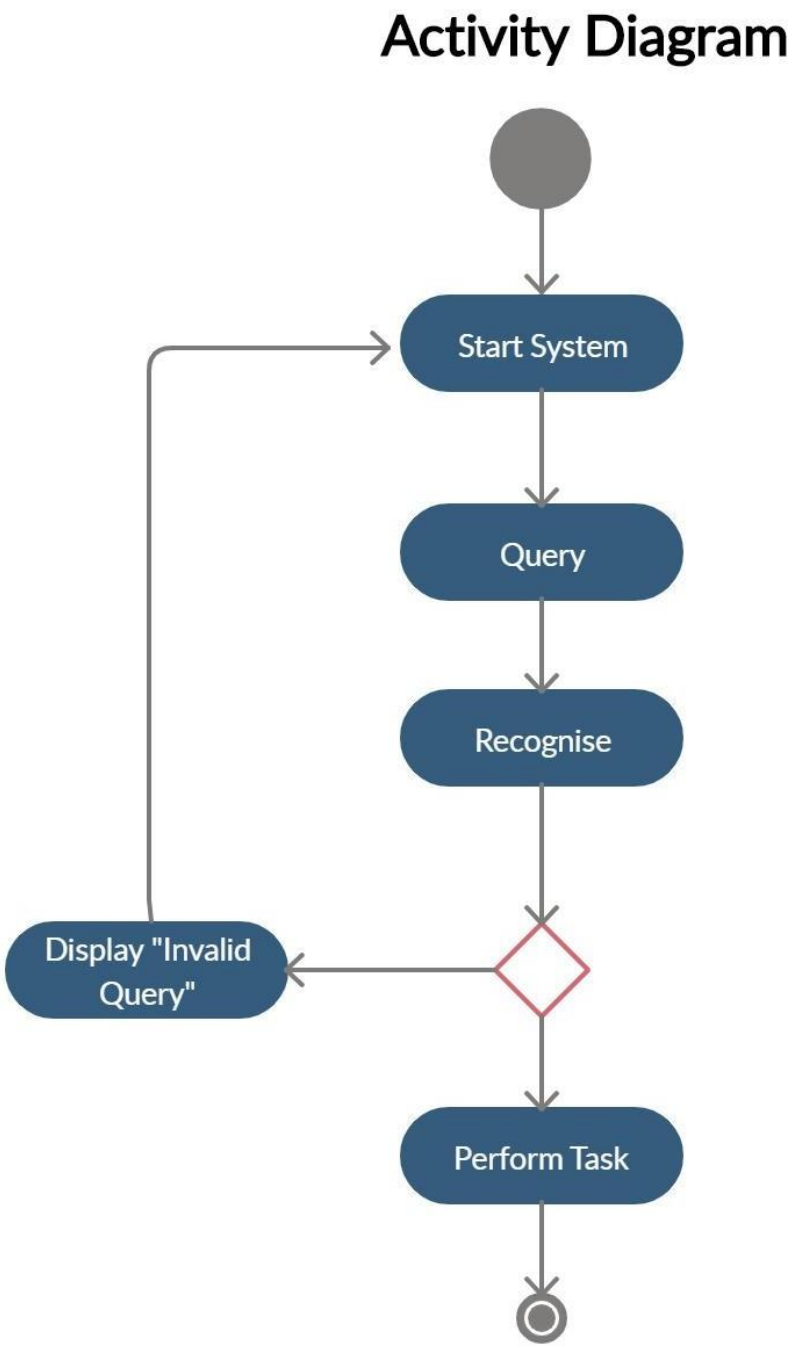
WHAT IS ACTIVITY DIAGRAM?

Activity diagram is another important behavioral diagram in UML diagram to describe dynamic aspects of the system. Activity diagram is essentially an advanced version of flow chart that modeling the flow from one activity to another activity

6.1. SEQUENCE DIAGRAM



6.2. ACTIVITY DIAGRAM



CHAPTER 7 :-
SAMPLE CODING

```
------------------------------CODE----------------------------------

import pyttsx3
from gtts import gTTS
import playsound
import  random
import speech_recognition as sr
import datetime
import socket
import pyspeedtest
class Methods
def __init__(self):
        self.__engine = pyttsx3.init('sapi5')
        self.__voices = self.__engine.getProperty('voice')
        self.__engine.setProperty('voice', self.__voices[0])


def speak_english(self, text):
        self.__engine.say(text)
        self.__engine.runAndWait()

def speak_gujrati(self, text):
        self.r1 = random.randint(1, 100000)
        self.audio = gTTS(text=text, lang='gu')
        self.audio.save("audio{}.mp3".format(self.r1))
        playsound.playsound("audio{}.mp3".format(self.r1))

def listen(self):
        r = sr.Recognizer()
with sr.Microphone() as source:
            playsound.playsound("soundeffect.mp3")
            r.pause_threshold=1
r.energy_threshold=3000
# r.non_speaking_duration=1
audio=r.listen(source)
            playsound.playsound("soundeffect1.mp3")
try:
                self.query=r.recognize_google(audio, language='gu-in')
except:
return "none"
return self.query

def checkcon(self):
        ip= socket.gethostbyname(socket.gethostname())
if (ip== "127.0.0.1"):
return False
        else:
return True
    def currenttime(self):
        time= datetime.datetime.now().ctime()
```

```
return time

def speedtest(self ):
        st= pyspeedtest.SpeedTest("www.google.com")
return st.ping()

def wishme(self):
        hour = int(datetime.datetime.now().hour)
if hour >=0 and hour <12:
                playsound.playsound("suprabhat.mp3")
return "સુપ્રભાત"
elif hour >=12 and hour <18:
                playsound.playsound("subhbapor.wav")
return "શુભ બપોર"
else:
            playsound.playsound("subhratri.mp3")
return "શુભ રાત્રી"
```

```
----------------------------GUI---------------------------------

from PyQt5.QtWidgets import *
from PyQt5 import QtGui
from PyQt5 import QtCore
from PyQt5 import QtWidgets
import code
import playsound
import requests, sys, webbrowser, bs4
import wikipedia
import bs4
import requests
import  os


method = code.Methods()

class Window(QWidget):
def __init__(self):
super(Window, self).__init__()
self.app= QtWidgets.QApplication(sys.argv)
self.setGeometry(100, 100, 700, 700)
self.setMaximumHeight(700)
self.setMaximumWidth(700)
self.stylesheet = """
            QPushButton {
            background: white;
            border-radius:10px;
            border: 1px solid rgb(12, 133, 199);
            }
            QLineEdit{
```

```
            background: white;
             border-radius:10px;
            border: 1px solid rgb(12, 133, 199)
            }
"""

self.setStyleSheet("background: white;")
self.setWindowIcon(QtGui.QIcon("mic.ico"))
self.setWindowTitle("Das")
self.app.setStyleSheet(self.stylesheet)
self.ui()

def ui(self):
self.font = QtGui.QFont()
self.font.setPixelSize(16)
self.font.setBold(False)

self.mainl = QVBoxLayout()
self.hbl2 = QHBoxLayout()
self.gb1 = QGroupBox(self)
self.gb1.setStyleSheet("border-radius: 10px; border: 1px solid rgb(12, 133, 199);")
self.wish= method.wishme()
self.labelmain = QLabel(self.wish, self)
self.labelmain.setFixedWidth(400)
self.labelmain.setFixedHeight(400)
self.labelmain.setStyleSheet("border:none;")
self.labelmain.setAlignment(QtCore.Qt.AlignHCenter | QtCore.Qt.AlignVCenter)
self.labelmain.setWordWrap(True)
self.labelmain.setFont(self.font)
self.hbl2.addWidget(self.labelmain)
self.gb1.setLayout(self.hbl2)
self.mainl.addWidget(self.gb1)

self.mainl.addStretch()
self.gb3 = QGroupBox(self)
self.hbl3 = QHBoxLayout(self)
self.gb3.setStyleSheet("border: none;")
self.gb3.setFont(self.font)
self.search = QPushButton("શોધો")
self.search.clicked.connect(self.fsearch)
self.search.setStyleSheet("background: white;border-radius:10px; border: 1px solid rgb(12, 133, 199);
padding:5px; ")
self.hbl3.addWidget(self.search)

self.l1 = QPushButton("મારું નામ શું છે")
self.l1.setStyleSheet("background: white; border-radius:10px; border: 1px solid rgb(12, 133, 199) ;padding:5px;")
self.l1.clicked.connect(self.fl1)
self.hbl3.addWidget(self.l1)

self.l2 = QPushButton("તમારા પપ્પાનું નામ શું છે")
self.l2.clicked.connect(self.fl2)
```

```
self.l2.setStyleSheet("background: white;border-radius:10px;  border: 1px solid rgb(12, 133, 199) ;padding:5px;")
self.hbl3.addWidget(self.l2)

self.l3= QPushButton("તમે ક્યાં રહો છો")
self.l3.clicked.connect(self.fl3)
self.l3.setStyleSheet("background: white; border-radius:10px; border: 1px solid rgb(12, 133, 199);padding:5px;")
self.hbl3.addWidget(self.l3)

self.l4= QPushButton("તાપમાન")
self.l4.clicked.connect(self.fl4)
self.l4.setStyleSheet("background: white; border-radius:10px; border: 1px solid rgb(12, 133, 199);padding:5px;")
self.hbl3.addWidget(self.l4)

self.l5 = QPushButton("રન વિન્ડો ખોલો")
self.l5.clicked.connect(self.fl5)
self.l5.setStyleSheet("background: white; border-radius:10px; border: 1px solid rgb(12, 133, 199);padding:5px;")
self.hbl3.addWidget(self.l5)

self.l6 = QPushButton("બહાર નીકળો")
self.l6.clicked.connect(self.fl6)
self.l6.setStyleSheet("background: white; border-radius:10px; border: 1px solid rgb(12, 133, 199);padding:5px;")
self.hbl3.addWidget(self.l6)
self.gb3.setLayout(self.hbl3)
self.mainl.addWidget(self.gb3)
self.hbl3.addStretch()

self.gb = QGroupBox(self)
self.hbl1 = QHBoxLayout()
self.gb.setStyleSheet("border-top: 1px solid rgb(12, 133, 199); border-radius:10px;")
self.tb1 = QLineEdit(self)
# self.tb1.setPlaceholderText("Write Query...")
self.tb1.setFont(self.font)
self.tb1.setAlignment(QtCore.Qt.AlignHCenter)
self.tb1.setFixedHeight(30)
self.tb1.setFixedWidth(500)
self.tb1.setPlaceholderText("અહીં ક્વેરી લખો....")
self.tb1.returnPressed.connect(self.onEnter)
self.hbl1.addStretch()
self.hbl1.addWidget(self.tb1)
self.mic = QPushButton()
self.mic.setObjectName("mic")
self.mic.setIcon(QtGui.QIcon("mic.ico"))
self.mic.setFixedHeight(30)
self.mic.setFixedWidth(100)
self.hbl1.addWidget(self.mic)
self.mic.setFont(self.font)
self.mic.clicked.connect(self.click)
self.hbl1.addStretch()
self.gb.setLayout(self.hbl1)
self.mainl.addWidget(self.gb)
self.setLayout(self.mainl)
```

```
self.show()

# def das(self):
    #     r = sr.Recognizer()
    #     with sr.Microphone() as source:
    #         playsound.playsound("soundeffect.mp3")
    #         r.pause_threshold = 1
    #         r.energy_threshold = 3000
    #         audio = r.listen(source)
    #         try:
    #             txt = r.recognize_google(audio, language='gu-in')
    #             if 'દાસ' in txt:
    #                 playsound.playsound("riptodas.mp3")
    #                 self.click()
    #             else:
    #                 self.das()
    #         except:
    #             return None

def fsearch(self):
if method.checkcon()==True:
            qry = self.tb1.text()
            webbrowser.open('https://www.google.com/search?q={}'.format(qry), new=1)
else:
self.labelmain.setText("ખાતરી કરો કે તમે ઇન્ટરનેટથી કનેક્ટ છો અને ફરીથી પ્રયાસ કરો.")

def fl2(self):
if method.checkcon()== True:
self.tb1.setText(self.l2.text())
            playsound.playsound("riptamarapapanunamsuche.mp3")
else:
self.labelmain.setText("ખાતરી કરો કે તમે ઇન્ટરનેટથી કનેક્ટ છો અને ફરીથી પ્રયાસ કરો.")

def fl1(self):
if method.checkcon()== True:
self.tb1.setText(self.l1.text())
            playsound.playsound("ripmarunamsuche.mp3")
else:
self.labelmain.setText("ખાતરી કરો કે તમે ઇન્ટરનેટથી કનેક્ટ છો અને ફરીથી પ્રયાસ કરો.")

def fl3(self):
if method.checkcon() == True:
self.tb1.setText(self.l3.text())
            playsound.playsound("ripkyarahocho.mp3")
else:
self.labelmain.setText("ખાતરી કરો કે તમે ઇન્ટરનેટથી કનેક્ટ છો અને ફરીથી પ્રયાસ કરો.")

def fl4(self):
if method.checkcon()== True:
            url =
"https://www.google.com/search?rlz=1C1CHBD_enIN852IN852&sxsrf=ALeKk016lFtwTGD7kpc_0CqmLWtB
```

```
N2igoA%3A1585564261630&ei=ZcqBXvz_JZ2V4-
EP6viNqAI&q=weather+today+at+my+location&oq=todays+wether&gs_lcp=CgZwc3ktYWIQARgAMgQIABB
HMgQIABBHMgQIABBHMgQIABBHMgQIABBHMgQIABBHMgQIABBHUABYAGCVhQFo
AHADeACAAQCIAQCSAQCYAQCqAQdnd3Mtd2l6&sclient=psy-ab"
data = requests.get(url)
        soup = bs4.BeautifulSoup(data.text, 'html.parser')
        txt = soup.find(attrs={"class": "ZINbbc xpd O9g5cc uUPGi"}).text
self.labelmain.setText(txt)
else:
self.labelmain.setText("ખાતરી કરો કે તમે ઇન્ટરનેટથી કનેક્ટ છો અને ફરીથી પ્રયાસ કરો.")

def fl5(self):
if method.checkcon()== True:
try:
            os.startfile(
"C:/Users/Default\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\System Tools\Run.lnk")
except:
            playsound.playsound("ripexception.mp3")
else:
self.labelmain.setText("ખાતરી કરો કે તમે ઇન્ટરનેટથી કનેક્ટ છો અને ફરીથી પ્રયાસ કરો.")

def fl6(self):
if method.checkcon()==True:
self.close()
else:
self.labelmain.setText("ખાતરી કરો કે તમે ઇન્ટરનેટથી કનેક્ટ છો અને ફરીથી પ્રયાસ કરો.")

def click(self):
if method.checkcon() == True:
        qry = method.listen()
if qry!= 'none':
self.tb1.setText(qry)
self.labelmain.setText(qry)
self.logic(qry)
else:
self.labelmain.setText("ફરીથી બોલો")
else:
self.labelmain.setText("ખાતરી કરો કે તમે ઇન્ટરનેટથી કનેક્ટ છો અને ફરીથી પ્રયાસ કરો.")

def logic(self, qry):

if "મારું નામ શું છે"in qry:
try:
            playsound.playsound("ripmarunamsuche.mp3")
except:
            playsound.playsound("tamarunamjanavsho.mp3")
            name = method.listen()
            method.speak_gujrati("તમારું નામ {}છે હું એમ કાંઇ થોડી ભૂલું".format(name))
            method.audio.save("ripmarunamsuche.mp3")
```

```
elif "શું જમ્યા"in qry or "શું જમ્યું"in qry:
try:
            playsound.playsound("ripjamaigyu.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "જમી લીધું"in qry:
try:
            playsound.playsound("ripjamilidhu.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "મ્યુઝિક વગાડો"in qry or " music વગાડો"in qry:
try:
            list = os.listdir("C:/Users\\ravi\Music")
for f in list:
if f.endswith(".mp3"):
                os.startfile("C:/Users\\ravi\Music\{}".format(f))
except:
            playsound.playsound("ripexception.mp3")

elif "પપ્પાનું નામ શું છે"in qry:
try:
self.labelmain.setText("")
            playsound.playsound("riptamarapapanunamsuche.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "કેમ છો"in qry or "મજામાં"in qry:
try:
            playsound.playsound("ripkemcho.mp3")
self.click()
except:
            playsound.playsound("ripexception.mp3")

elif "પતિ નું નામ શું છે"in qry:
try:
            playsound.playsound("riptamarapatinunamsuche.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "શું ટાઈમ થયો"in qry or "ટાઈમ શું થયો"in qry or "કેટલા વાગ્યા"in qry:
try:
self.labelmain.setText(method.currenttime())
except:
             playsound.playsound("ripexception.mp3")

elif "ફાઈલમેનેજર ખોલો"in qry:
try:
if os.path.exists("C:/Users/Default\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\System
```

```
Tools\File Explorer.lnk"):
                os.startfile("C:/Users/Default\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\System
Tools\File Explorer.lnk")
else:
                playsound.playsound("ripfileexits.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "સર્ચ એવરીથિંગ ખોલો"in qry:
try:
if os.path.exists("C:\Program Files (x86)\Everything\Everything.exe"):
                os.startfile("C:\Program Files (x86)\Everything\Everything.exe")
else:
                playsound.playsound("ripfileexits.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "command prompt ખોલો"in qry:
try:
if os.path.exists("C:/Users/Default\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\System
Tools\Command Prompt.lnk"):
                os.startfile("C:/Users/Default\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\System
Tools\Command Prompt.lnk")
else:
                playsound.playsound("ripfileexits.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "કંટ્રોલ પેનલ ખોલો"in qry:
try:
if os.path.exists("C:/Users/Default\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\System
Tools\Control Panel.lnk"):
                os.startfile("C:/Users/Default\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\System
Tools\Control Panel.lnk")
else:
                playsound.playsound("ripfileexits.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "રન વિન્ડો ખોલો"in qry:
try:
if os.path.exists("C:/Users/Default\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\System
Tools\Run.lnk"):
                os.startfile("C:/Users/Default\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\System
Tools\Run.lnk")
else:
                playsound.playsound("ripfileexits.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "કેલ્ક્યુલેટર ખોલો"in qry or "કેલકુલેટર ખોલો"in qry:
```

```
try:
if os.path.exists("C:\Windows\System32\calc.exe"):
                os.startfile("C:\Windows\System32\calc.exe")
else:
                playsound.playsound("ripfileexits.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "નોટપેડ ખોલો"in qry:
try:
if os.path.exists("C:\Windows\System32\\notepad.exe"):
                os.startfile("C:\Windows\System32\\notepad.exe")
else:
                playsound.playsound("ripfileexits.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "sublime ખોલો"in qry:
try:
if os.path.exists("C:\Program Files\Sublime Text 3\sublime_text.exe"):
                os.startfile("C:\Program Files\Sublime Text 3\sublime_text.exe")
else:
                playsound.playsound("ripfileexits.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "ટાસ્ક મેનેજર ખોલો"in qry:
try:
if os.path.exists("C:/Users/Default\AppData\Local\Microsoft\Windows\WinX\Group2\\5 - Task Manager.lnk"):
                os.startfile("C:/Users/Default\AppData\Local\Microsoft\Windows\WinX\Group2\\5 - Task
Manager.lnk")
else:
                playsound.playsound("ripfileexits.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "logoff કરો"in qry or "સિસ્ટમ logoff કરો"in qry:
try:
if os.path.exists("C:\Windows\System32\logoff.exe"):
                os.startfile("C:\Windows\System32\logoff.exe")
else:
                playsound.playsound("ripfileexits.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "શટડાઉન કરો"in qry or "સિસ્ટમ શટડાઉન કરો"in qry or "સિસ્ટમ sundown કરો"in qry or "sundown કરો"in
qry:
try:
            os.system("shutdown /s /t 1")
except:
            playsound.playsound("ripexception.mp3")
```

```
elif "બહાર નીકળો"in qry:
try:
self.close()
except:
            playsound.playsound("ripexception.mp3")

elif "શું કરો છો"in qry:
try:
            playsound.playsound("ripsukarocho.mp3")
            txt= method.listen()
if "હા"in txt:
self.labelmain.setText("નાનપણમાં કોઇ કહેતુ કે મારો દીકરો ફલાણા દેશમાંથી આવ્યો છે તો આખુ ગામ જોવા જતુ,અત્યારે કોઇ કહે તો આખી સોસાયટી ખાલી થઇ જાય છે...)
                playsound.playsound("jock1.mp3")
                txt= method.listen()
if "હજી એક"in txt:
self.labelmain.setText(""છેલ્લા અઠવાડિયાથી પાણી પુરી અને વડાપાઉં નો ટેસ્ટ બદલાઇ ગયો છે.મને લાગે છે કે લારીવાળાઓ એ હાથ ધોવાનું ચાલું કર્યું લાગે છે)
                    playsound.playsound("jock2.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "તમારું નામ શું છે"in qry or "તારું નામ શું છે"in qry:
try:
            playsound.playsound("riptamarunamsu6.mp3")
self.click()
except:
            playsound.playsound("ripexception.mp3")

elif "તમારી ઉંમર"in qry or "તારી ઉંમર"in qry:
try:
            playsound.playsound("riptamariumar.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "તમે ક્યાં રહો છો"in qry or "તું ક્યાં રહે છે"in qry:
try:
            playsound.playsound("ripkyarahocho.mp3")
except:
            playsound.playsound("ripexception.mp3")

elif "વિકિપીડિયા"in qry:
try:
            playsound.playsound("susearchkaruwikipediama.mp3")
            txt = method.listen()
            wikipedia.set_lang('gu')
            ret = wikipedia.summary(txt, sentences=2)
            playsound.playsound("lyokamthaigyu.mp3")
self.labelmain.setText(ret)
```

```
            method.speak_gujrati(ret)
            os.remove("audio{}.mp3".format(self.method.r1))
except:
            playsound.playsound("ripexception.mp3")

elif "ક્યાં છે"in qry:
try:
            url = "https://www.google.com/search?q={}".format(qry)
            data = requests.get(url)
            soup = bs4.BeautifulSoup(data.text, 'html.parser')
            txt = soup.find(attrs={"class": "BNeawe s3v9rd AP7Wnd"}).text
self.labelmain.setText(txt)
            method.speak_gujrati(txt)
            os.remove("audio{}.mp3".format(method.r1))
except:
            playsound.playsound("ripexception.mp3")

elif "તાપમાન"in qry:
try:
            url =
"https://www.google.com/search?rlz=1C1CHBD_enIN852IN852&sxsrf=ALeKk016lFtwTGD7kpc_0CqmLWtB
N2igoA%3A1585564261630&ei=ZcqBXvz_JZ2V4-
EP6viNqAI&q=weather+today+at+my+location&oq=todays+wether&gs_lcp=CgZwc3ktYWIQARgAMgQIABB
HMgQIABBHMgQIABBHMgQIABBHMgQIABBHMgQIABBHMgQIABBHUABYAGCVhQFo
AHADeACAAQCIAQCSAQCYAQCqAQdnd3Mtd2l6&sclient=psy-ab"
data = requests.get(url)
            soup = bs4.BeautifulSoup(data.text, 'html.parser')
            txt = soup.find(attrs={"class": "ZINbbc xpd O9g5cc uUPGi"}).text
self.labelmain.setText(txt)
except:
            playsound.playsound("ripexception.mp3")

elif "youtube ખોલો"in qry:
try:
            webbrowser.open("https://www.youtube.com/", new=1)
except:
            playsound.playsound("ripexception.mp3")

elif "કોણ છે"in qry:
try:
            url = "https://www.google.com/search?q={}".format(qry)
            data = requests.get(url)
            soup = bs4.BeautifulSoup(data.text, 'html.parser')
            txt = soup.find(attrs={"class": "BNeawe s3v9rd AP7Wnd"}).text
            self.labelmain.setText(txt)
            method.speak_gujrati(txt)
            os.remove("audio{}.mp3".format(method.r1))
except:
            playsound.playsound("ripexception.mp3")

elif "શું છે"in qry:
```

```
try:
            url = "https://www.google.com/search?q={}".format(qry)
            data = requests.get(url)
            soup = bs4.BeautifulSoup(data.text, 'html.parser')
            txt = soup.find(attrs={"class": "BNeawe s3v9rd AP7Wnd"}).text
            self.labelmain.setText(txt)
            method.speak_gujrati(txt)
            os.remove("audio{}.mp3".format(method.r1))
except:
            playsound.playsound("ripexception.mp3")

else:
        playsound.playsound("lyokamthaigyu.mp3")
        self.fsearch()


def onEnter(self):
    qry = self.tb1.text()
    self.logic(qry)
```

```
-----------------------------MAIN-----------------------------

import GUI
import sys
from PyQt5.QtWidgets import *

if __name__ == '__main__':
    app = QApplication(sys.argv)
    win = GUI.Window()
    sys.exit(app.exec_())
```

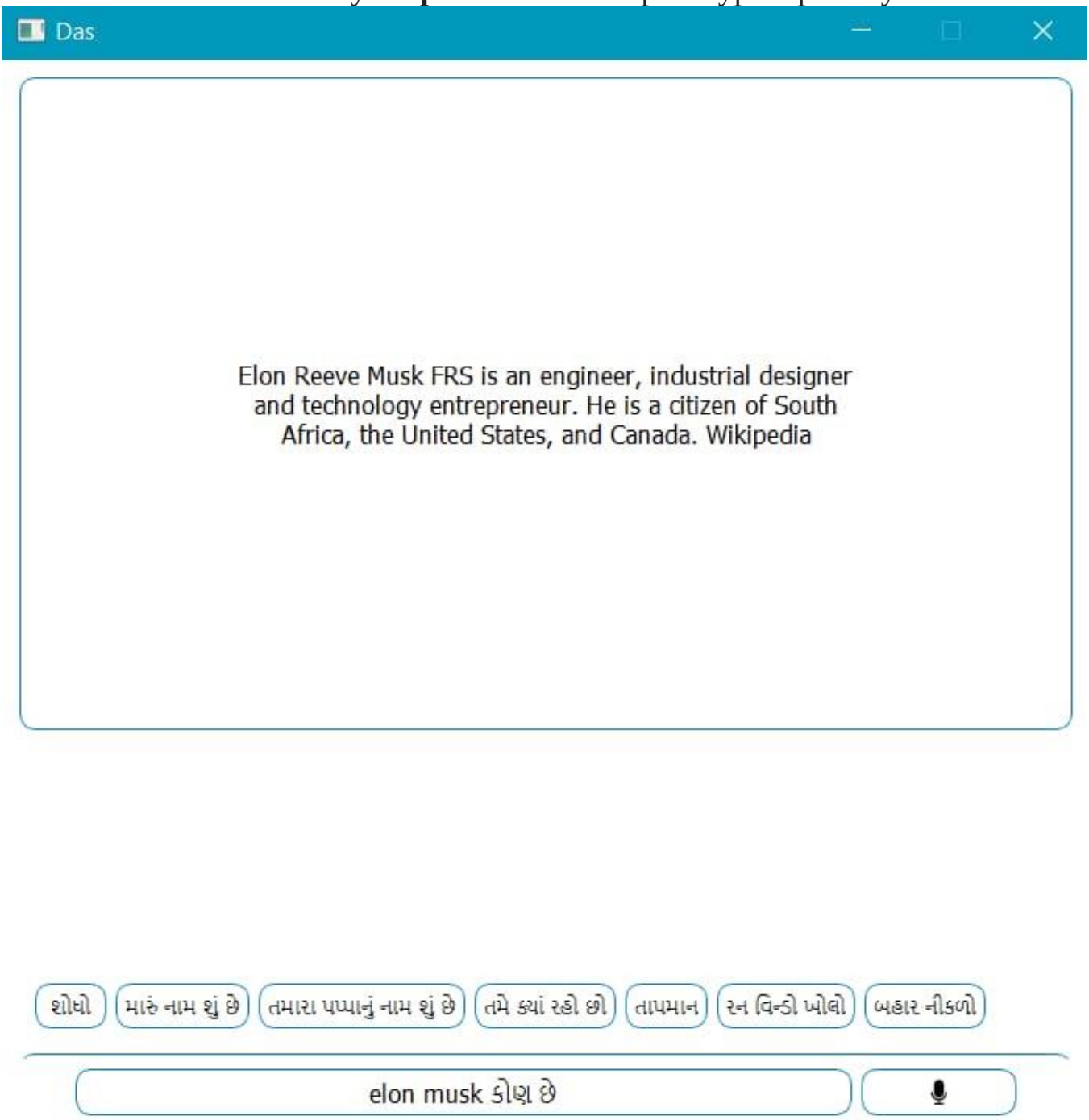
CHAPTER 8 :-
System Interface Design

8.1 User Interface Design :-

User interface (UI) design is the process of making interfaces in software or computerized devices with a focus on looks or style. Designers aim to create designs users will find easy to use and pleasurable. UI design typically refers to graphical user interfaces but also includes others, such as voice-controlled ones.

8.2 Output Design :-

The **design** of **output** is the most important task of any system. During **output design**, developers identify the type of **outputs** needed, and consider the necessary **output** controls and prototype report layouts.



CHAPTER 9 :-

Testing

PC VOICE ASSISTANT	
Test Case Template	
Test Case ID: p_23	
Test Priority (Low/Medium/High): Med	
Module Name: PC Voice assistant	
Test Title: Checking application with quires	
Description: verify and checking the Internet connection and get from website to application	

Step	Test Step	Test Data	Expected Result	Actual Result	Status	Notes
1	Open Application				Pass	
2	Enter Query	Weather	Weather Information	Weather Info. Displayed on Application	Pass	
3	Enter Query	Open Youtube	Youtube Should be open	Youtube will open	Pass	

CHAPTER 10 :-
Limitations of The System

Limitations of The System:-

- Voice assistants use single commands. For now, these consist mostly of fixed phrases. Effectively, they push one button or set one dial.
- As more flexible natural language understanding technology is becoming available, interpretations of speech commands may be become ambiguous. With commands resulting into actions, misunderstandings can be risky. Did I really want to set the oven to 600 degrees? Do we need “guard rails”?
- Voice assistants support only one-way “conversations”. The appliances cannot talk back, asking for clarification of intent. Building checks into the skills executed in the cloud does not completely solve this problem.
- The commands are independent of the state of the device. The user has to know whether an oven is on, when the heat should be turned lower, etc.
- The stateless aspect of the voice commands also limits the ability to support action sequences if those actions depend on the state of the device. Have I turned on the exhaust before I turn on a burner on the stove?

- Appliances generally cannot initiate conversations, or give alerts by saying, for instance, that the clothes washer is finished, or that the pot on the stove top is boiling over.
- In many cases, only a subset of the appliance functionality is accessible via voice assistant. This can be due to safety reasons. A stove top burner should be turned on only when somebody is in the kitchen. Or it can be because a function is complex and depends on the state of the appliance, e.g. bring the water to a boil, and cook the pasta until tender.
- Voice assistants cannot integrate context data, such as who is in the kitchen? is there milk in the refrigerator?
- They typically do not remember history — how did we do this the last time?
- They depend on an Internet connection, and the obstacles it has in each home that can make it less than reliable.

CHAPTER 11 :-
Future scope of the system

Future Scope of the System:-

- Voice assistants present an interesting opportunity for marketers and small business owners.

- As more consumers adopt them, branded skills and apps can help keep your company top of mind, plus you can work radio-style ads into free apps. Those same consumers download lots of free smartphone apps with ads, it seems like it would work as well on a smart speaker.

- Your target market or target audience is getting harder to find than ever, but utilizing voice assistants in new and interesting ways could be another angle for finding your way back into their hearts and homes. Sure, there are pros and cons to these new fangled digital voice assistants, but they could very well represent a huge opportunity.

CHAPTER 12 :-
References

REFERENCES

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-https://creately.com/

For Python modules:

-https://pypi.org/

-https://www.simplifiedpython.net/

-https://www.geeksforgeeks.org/

For Translation:

-https://translate.google.com/

CHAPTER 13 :-
Biography

Biography:-

Babariya.V ,Harkhani.R & Solanki.N(2020). PC voice assisatnce

Rajkot GUJ:AVPT